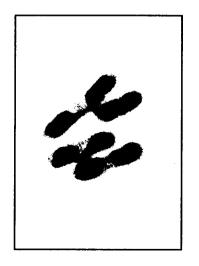
Transmission of genetic information between two E. coli bacteria occurs during a process known as conjugation.

coli bacteria occurs during a process known as conjugation. Dr. Lederberg discovered this process in 1946, proving that a form of sexual reproduction occurs in these asexual microorganisms. In the microaraph below, two bacteria make cell-to-cell contact through the formation of a connecting bridge. The bacterium acting as a male donor contributes DNA to the bacterium actina as a female recipient. The recipient incorporates the new genetic information into its own chromosome by recombination and passes the recombined set on to its progeny by replication.



Personal Memo Iron JOSHUA LEDERRERO

I feel somewhat best ful to Blow you this figure. I would need prefu to have about your E-M slices!

appropriate in me to even ask to use
the frame from you besis until
you to published from.

So this is awaited with expediency

Grisaly, Han Fally

POSTDOCTORAL POSITION

MOLECULAR GENETICS TRANSCRIPTION AND MUTAGENESIS

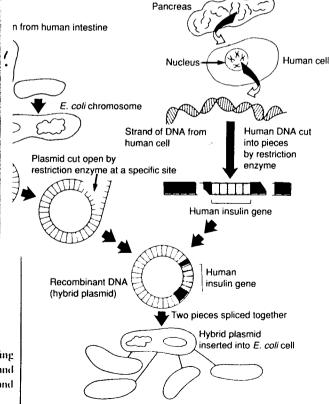
Position open for a Ph.D. in biochemistry or molecular biology

Experience is sought in molecular basis of gene expression, especially DNA footprinting methodology. This will be a collaboration to study the interactions of gene expression and mutagenesis in $E.\ coli.$ Apply with C.V., one letter of reference from your Ph.D. sponsor and names of 3 referees to:

Professor Joshua Lederberg

es:

to a main chromosome, bacteria contain plasmids tlar molecules of double-stranded DNA which ttonomously. Scientists are able to insert foreign plasmids, which then multiply and produce cells genetically identical material, or clones. duce a human gene (in this case, the one for insulin) nid, scientists take the plasmid out of an E. coli break the plasmid open at a specific site by means of tenzyme, and splice in insulin-making human resulting hybrid plasmid can be inserted into coli bacterium, where it replicates together with the making it capable of producing large quantities of



Bacteria with hybrid plasmid replicate, creating clones capable of producing insulin